

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

REMARKS

Claims 1-10, 12-17, 19, and 21 are pending in this application, stand rejected, and are at issue herein. Reconsideration of claims 1-10, 12-17, 19, and 21 in view of the following remarks and indication of the allowability thereof are respectfully solicited.

The Examiner has rejected claims 1-8, 10, 12-15, 17, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Polatschek (GB 2,152,437) in view of Evans (GB 2,336,570) and Kohl (product description entitled "Reading to the Left"). This ground of rejection is respectfully traversed. Reconsideration of this ground of rejection and indication of the allowability of claims 1-8, 10, 12-15, 17, and 19 in view of the following remarks are respectfully solicited.

The Polatschek reference on which the Examiner primarily relies disclosed a keyboard mask that is designed to satisfy its "main object...to provide means for instantaneous change the marks on all, or a portion of, the keys of a keyboard of an office machine." Polatschek, column 1, 58-61. As described in the Polatschek reference, the provision of a single keyboard may not be productive when different programs that assign special functions to keyboard keys are used, or when different alphabets need to be typed using the single keyboard. Indeed, Polatschek states that some keyboards "are provided with two or three marks or symbols on each key." However, Polatschek specifically teaches away from the use of a keyboard with two or three marks or symbols on each key by stating that "this may lead to mistakes and errors, besides of the possible lack of lucidity." As such, Polatschek provides an explicit teaching away of the use of any keyboard that utilizes two or three marks or symbols on each key.

To overcome the problem discussed in Polatschek, a keyboard mask is provided that includes a plurality of pockets to accommodate each key of the keyboard. Polatschek describes that these pockets may either be transparent for keys which are not to be changed or opaque for those that are to be changed. At least a portion of the opaque pockets may be inscribed with a mark or a symbol "different from the key it covers." Polatschek, column 2, lines 85-88. Polatschek specifically describes that the pockets covering keys which are to remain unchanged are left transparent. Alternatively, the keys may be opaque but inscribed with a mark identical with the original mark on the key. See Polatschek, column 2, lines 88-91.

In summary, Polatschek describes that a keyboard with only a single set of symbols is not useful when other applications are used or when needing to type in different languages. Polatschek also teaches that the provision of two or more symbols on a single key is to be avoided as this may lead to mistakes and errors, besides of the possible lack of lucidity. In view of these perceived problems, Polatschek teaches a keyboard mask which allows a user to see only a single symbol on each key. This symbol may be different from the symbol on the underlying key, or may be identical thereto. If identical, the pocket over that key may be left transparent. In no case, however, does Polatschek allow for the display of more than a single symbol or character on any keyboard key, as such "may lead to mistakes and errors, besides of the possible lack of lucidity." Polatschek, column 1, lines 48-52.

Despite these explicit teachings, the Examiner has proposed a modification of the Polatschek reference by combining it with Evans and Kohl. While the disclosure of Polatschek may be consistent with portions of the Evans reference, for example the description in Evans that the overlay is opaque on page 4, lines 6-11 and page 3, lines 5-9, and the portion that describes the inclusion of a single lower case letter in the center of each key shown in FIG. 1, the description of Polatschek that teaches away from the inclusion of two or three symbols on each key is inconsistent with the teachings of FIG. 2 of Evans disclosing the upper and lower case letters on the overlay. That is, Polatschek specifically teaches away from the inclusion of two different symbols on a single key in column 1, lines 48-52, stating that such may lead to mistakes and errors besides of the possible lack of lucidity. Therefore, the Applicant respectfully submits that one skilled in the art would not be motivated to make such a combination in view of the specific teaching away of the provision of two symbols on a single key.

Further, the Kohl reference teaches the placement of clear keyboard stickers having Hebrew characters that will not block out the English alphabet keys. The result of the use of the stickers of Kohl is that each of the keyboard keys will now have two symbols displayed thereon. However, Polatschek specifically teaches away from such a structure in column 1, lines 48-52. That is, Polatschek recognizes that some keyboards are provided with two or three marks or symbols on each key, but that "this may lead to mistakes and errors, besides of the possible lack of lucidity." Therefore, the Applicant respectfully submits in view of this

explicit teaching away that one skilled in the art would not be motivated to make such a combination.

Even assuming, *arguendo*, that such a proposed modification could be supported under the law, the resulting structure would still not teach or suggest all of the limitations of the rejected claims. Instead, the resulting keyboard mask from such a combination would have to allow only a single symbol or character to be visible on each keyboard key in view of the explicit teaching away from the provision of two or more symbols on any key in Polatschek. Further, while Polatschek indicates that the keys may be opaque, or if the symbol on the key is not to be changed, transparent, Evans specifically requires that the keyboard overlay be opaque. The Applicant is unclear on what effect the structure of Kohl would have other than to provide the clear stickers on the top of the key accommodating structures of the overlay to add a second symbol on that key. However, as discussed at length above, Polatschek specifically teaches away from the inclusion of two or more symbols on each key as such "may lead to mistakes and errors, besides of the possible lack of lucidity."

However, independent claim 1 requires, *inter alia*, that each of the individual key accommodating structures have at least a transparent upper surface to allow the printed indicia on a key of the keyboard to be visible therethrough and at least a portion of the transparent upper surfaces of the key accommodating structures that correspond to alphabet keys of the keyboard having a lower case letter positioned thereon in a non-interfering location relative to the position of the printed indicia on the alphabet key. However, this structure is specifically taught against by Polatschek in that the printed indicia on the key of the keyboard and the lower case letter on the upper surface of the overlay will be visible to the user.

Additionally, independent claim 15 also requires, *inter alia*, that both the upper case letter and the lower case letter are visible without interfering with one another. Similarly independent claim 19 requires, *inter alia*, the provision of a data entry device that displays both upper and lower case letters in association with one another. However, Polatschek teaches away from these structures and method in column 1, lines 48-52 wherein it teaches that providing a keyboard with two or more marks or symbols on each key may lead to mistakes and errors, besides of the possible lack of lucidity.

The combination of Evans does not negate the specific teaching away. In fact, Evans requires that the overlays be opaque, and does not allow for transparent upper surfaces whatsoever. As such, this would appear to also teach away from the Applicant's claimed invention. The Applicant also respectfully submits that the inclusion of clear stickers with Hebrew characters printed thereon also does not overcome the deficiencies of these references nor negate the explicit teaching away from the structure claimed by these claims.

Additionally, such a modification proposed by the Examiner would render the keyboard mask of Polatschek inappropriate for its intended purpose as specifically precluded by MPEP § 2143.01. That is, the intended purpose of the Polatschek keyboard mask is to provide a means for instantaneous change of the marks on all or a portion of the keys of the keyboard of an office machine to change the marks on the keyboard to another language or to another program. However, the proposed modification set forth by the Examiner would result in a keyboard mask that does not change the marks on the keys of a keyboard of an office machine, but instead simply adds an additional mark on those keys resulting in two or more symbols being displayed to the user. Not only does such a structure violate the specific teaching away from the use of two or more symbols on each key, but also no longer "changes" the marks on all or a portion of the keys of the keyboard of an office machine to allow usage of this keyboard with another program or another language without leading to mistakes and errors besides of the possible lack of lucidity. As such, the Applicant respectfully submits that this ground of rejection is improper for this additional reason as well.

With regard to claims 2-7 and 12-14, the Examiner states the positioning and the font style of lower case letters are an obvious choice of design inasmuch as the Applicant discloses no advantage or critical need for them. However, the Applicant continues to state that while paragraph [0051] states that the use of nearly any font displaying lower case letters will aid a child and more easily enable that child to enter data into a computer than having to use only upper case letters provided on a standard keyboard, the Applicant also sets forth that the use of the same font as is taught for both reading and writing by a school allows the present invention "to fully integrate and reinforce the child's early learning." As such, the Applicant continues to assert that it is inappropriate for the Examiner to disregard this explicit statement in the specification or discount the relationship between the font taught children


opaque sticker having both upper and lower case letters and a Hebrew letter that can be affixed to the top of a keyboard key, but which does not result in an overlay of any type.

When either of these combinations are taken in view of Lyons et al., the combination becomes less certain. That is, since Evans specifically requires that the overlay be opaque, and Lyons et al. specifically requires that the overlay be transparent, the Applicant is unclear how the Examiner can support such a proposed combination. That is, the Lyons et al. reference teaches that self-adhesive stickers are attached to the underside of the faces of the key accommodating structures of the transparent overlay of Lyons et al. to provide appropriate markings to designate the functions of particular keys when used, for example, when a software package such as a game assigns specific control functions with particular keys. The adhesive stickers are opaque, and cover the underlying indicia on the keys. That is, Lyons et al. does not teach that both the underlying indicia on a key and the indicia provided on the self-adhesive sticker may be visible at the same time as required by the claims of the present application. Instead, if the underlying indicia of the key is to be visible, no self-adhesive sticker is to be used in that particular transparent key accommodating structure. However, if the opaque overlay of Evans is combined with the structure of Lyons et al., Lyons will become inappropriate for its intended purpose as the other keys that are not to be changed may no longer be visible.

In view of the above, the Applicant respectfully submits that claims 1-10, 12-17, 19, and 21 are in condition for allowance. Reconsideration of claims 1-10, 12-17, 19, and 21 in view of the foregoing remarks are therefore respectfully solicited.

If the Examiner believes that a telephonic conversation will aid in the resolution of any issues not resolved herein, the Examiner is invited to contact the Applicant's attorney at the telephone number listed below.

Respectfully submitted,



Jeffrey J. Makeever, Reg. No. 37390
LEYDIG, VOIT & MAYER, LTD.
6815 Weaver Road, Suite 300
Rockford, Illinois 61114-8018
(815) 963-7661 (telephone)
(815) 963-7664 (facsimile)

Date: December 29, 2003

during reading and writing and that used on the keyboard. As such, the embodiments claimed by these claims are not the result of mere design choice, but provide distinct advantages disclosed by the Applicant in her originally filed specification, which advantages the Examiner is not permitted to disregard.

The Examiner has also rejected claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Polatschek, Evans, and Kohl as stated above, and further in view of Nichol '825. The Applicant reiterates the arguments stated above with regard to the combination of Polatschek, Evans, and Kohl. As such, the Applicant respectfully submits that claim 16 is patentable for these same reasons as well.

The Examiner has also rejected claims 1, 8, 9, 15, 16, 19, and 21 under 35 U.S.C. § 103(a) as being unpatentable over Kohl in view of Evans or ETN and Lyons et al. (WO 94/00809). This ground of rejection is respectfully traversed. Reconsideration of this ground of rejection in view of the following remarks and indication of the allowability of claims 1, 8, 9, 15, 16, 19, and 21 at an early date are respectfully solicited.

As discussed above, Kohl teaches transparent stickers that may be affixed to the top surface of keyboard keys that include Hebrew characters in a location such that both the underlying English character and the Hebrew character may be visible once the sticker is affixed on the upper surface of the key. Evans, however, teaches an opaque overlay (see page 3, lines 5-9; page 4, lines 6-11) that includes either a single lower case letter in the center of the keys (see FIG. 1) or both upper and lower case letters on the upper surface of the overlay (see FIG. 2). As such, the combination of Evans with Kohl will result in an opaque overlay having a lower case letter in the center and a Hebrew letter (if the sticker were applied to the overlay as opposed to the keyboard as specifically taught by Kohl). Alternatively, the combination of Kohl and Evans may result in an opaque overlay having both upper and lower case English letters and a Hebrew letter displayed (once again if the Kohl sticker is applied to the overlay as opposed to the keyboard as specifically required by the Kohl reference).

However, the Applicant is unclear how the Examiner would modify Kohl with ETN since this ETN reference teaches opaque stickers that have "both upper and lower case letters" displayed thereon. The Applicant supposes that such a combination may result in an